A6 Concl.

a primary cross-connect switch coupled between the primary line interface unit and the primary processing subsystem configurable to disconnect the primary line interface unit from the primary processing subsystem and connect a secondary line interface unit to the primary processing subsystem or connect a secondary processing subsystem to the primary line interface unit.

Please add the following new claims 2-31:

2.(New) A network processing system according to claim 1 including a secondary cross-connect switch coupled between the secondary line interface unit and the secondary processing subsystem, the primary cross-connect switch configurable to connect either one of the primary line interface unit and the primary processing subsystem to the secondary cross-connect switch and the secondary cross-connect switch configurable to connect either one of the secondary line interface unit and secondary processing subsystem to the primary cross-connect switch.

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3. (New) A network processing system according to claim 2 wherein the primary processing subsystem is automatically disconnected by the primary cross-connect switch from the primary line interface unit and the secondary processing subsystem is automatically connected through the primary and secondary cross-connect switches to the primary line interface unit.

4. (New) A network processing system according to claim 1 wherein the primary processing subsystem includes a framer for framing multiple groups of telephone calls into individual telephone calls and modem modules for converting the individual telephone calls into packets.

5. (New) A network processing system according to claim 4 including an individual cross-connect switch redirecting individual calls from individual failed modem modules to individual standby modems, the primary cross-connect switch redirecting groups of calls from failed framers or failed banks of modems to secondary framers or secondary banks of modems.

6. (New) A network processing system according to claim 1 including multiple feature cards each having cross-connect switches connected between a line interface unit and a processing subsystem, the cross-connect switches in the feature cards connected together for connecting the line interface unit in any feature card to the processing subsystem in other feature cards.

7. (New) A network processing system according to claim 6 wherein at least one of the feature cards converts between channelized T1 telephone calls and network IP packets and at least one of the feature cards converts between channelized T3 telephone calls and network IP packets.

8. (New) A network processing system according to claim 6 including a processor on the feature cards that monitors for failures and automatically reconfigures the cross-connect switches on the feature cards according to the monitored failures.

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9. (New) A switch, comprising:

a first interface configured to connect to a first line interface unit;

a second interface configured to connect to a first packet processing circuit that processes data received by the first line interface unit; and

a third interface configured to connect to either a second line interface unit or a second packet processing circuit;

the switch disconnecting from the first line interface unit and connecting to the second line interface unit when the first line interface unit fails and disconnecting from the first packet processing circuit and connecting to the second packet processing circuit when the first packet processing circuit fails.

10. (New) A switch according to claim 9 including a first multiplexer coupling inputs from the second or third interface to the first interface; a second multiplexer coupling inputs from the first or third interface to the second interface, and a third multiplexer coupling inputs from the first or second interface to the third interface.

11. (New) A switch according to claim 10 including a configuration register that configures which interface is output from each multiplexer.

12. (New) A switch according to claim 11 wherein the first and second line interface unit are coupled to telephone lines, and the first and second packet processing circuit convert telephone line calls into digital packets.

13. (New) A switch according to claim 9 wherein the first and second line interface unit and the first and second packet processing circuit are located in the same feature card.

14. (New) A method for connecting components together in a network processing system, comprising:

connecting a line interface unit to a processing system that processes data received over the line interface unit;

monitoring the line interface unit and the processing system for failures;

switching out the line interface unit when the line interface unit fails while maintaining operation of the processing system; and

automatically switching out the processing system when the processing system fails while maintaining operation of the line interface unit.

15. (New) A method according to claim 14 including automatically switching out individual failed modems in the processing system while other modems in the processing system maintain operation.

16. (New) A method according to claim 15 including automatically switching out individual failed framers in the processing system while other modems in the processing system maintain operation.

17. (New) A method according to claim 14 including automatically switching out individual failed framers and individual failed modems in the data processing system while other framers and modems in the processing system maintain operation.

18. (New) A method according to claim 14 including automatically switching out different failed line interface units in a same feature card or switching out different failed line interface units in different feature cards.

19. (New) A method according to claim 18 including connecting different clocks received from different line interface units to the processing system according to which of the line interface units are connected to the processing system.

20. (New) A system for connecting components together in a network processing system, comprising:

means for connecting a line interface unit to a processing system that processes data received over the line interface unit;

means for monitoring the line interface unit and the processing system for failures;

means for switching out the line interface unit when the line interface unit fails while maintaining operation of the processing system; and

means for automatically switching out the data processing system when the data processing system fails while maintaining operation of the line interface unit.

21. (New) A system according to claim 20 including means for automatically switching out individual failed modems in the processing system while other modems in the processing system maintain operation.

22. (New) A system according to claim 21 including means for automatically switching out individual failed framers in the processing system while other modems in the processing system maintain operation.

23. (New) A system according to claim 20 including means for automatically switching out individual failed framers and individual failed modems in the processing system while other framers and modems in the processing system maintain operation.

24. (New) A system according to claim 20 including means for automatically switching out different failed line interface units in a same feature card or switching out

different failed line interface units in different feature cards.

25. (New) A system according to claim 24 including means for connecting different clocks received from different line interface units to the processing system according to which of the line interface units are connected to the processing system.

26. (New) An article comprising a machine-accessible medium having associated data that, when accessed, results in the following:

connecting a line interface unit to a processing system that processes data received over the line interface unit;

monitoring the line interface unit and the processing system for failures;

switching out the line interface unit when the line interface unit fails while maintaining operation of the processing system; and

automatically switching out the data processing system when the data processing system fails while maintaining operation of the line interface unit.

27. (New) The machine-accessible medium of claim 26 including automatically switching out individual failed modems in the processing system while other modems in the processing system maintain operation.

28. (New) The machine-accessible medium of claim 27 including automatically switching out individual failed framers in the processing system while other modems in the processing system maintain operation.

29. (New) The machine-accessible medium of claim 26 including automatically switching out individual failed framers and individual failed modems in the processing system while other framers and modems in the processing system maintain operation.

30. (New) The machine-accessible medium of claim 26 including automatically switching out different failed line interface units in a same feature card or switching out different failed line interface units in different feature cards.

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31. (New) The machine-accessible medium of claim 30 including connecting different clocks received from different line interface units to the processing system according to which of the line interface units are connected to the processing system.